

## **ABSTRACT**

The present invention pertains to a stiffened balloon which can be used in angioplasty, endovascular, and valvuloplasty procedures or as a delivery balloon to deliver a stent or a stent-graft. Longitudinally discontinuous stiffening members connected to the expandable balloon stiffen the balloon but allow it to be navigated through curved passages. Projections on the stiffening members may engage, incise, crush, fracture, or pierce occlusions or retain a stent or stent-graft. Radio-opaque portions may be referenced to determine orientation. Longitudinally continuous stiffening members bearing projections and connected to the balloon perform in a similar manner.